

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028881**Date Inspected:** 15-Dec-2012**Project Name:** SAS Superstructure**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Arrival Time:****OSM Departure Time:****Location:** jobsite

<b>CWI Name:</b>	Fred Michaels		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No
<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved WPS:</b>	Yes	No N/A
<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Component:</b>	OBG	

**Bridge No:** 34-0006**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Matthew Daggett was at the American Bridge/Fluor (ABF) job site at the San Francisco/Oakland Bay Bridge in California between the times noted above in order to perform clerical support tasks in the office, and to monitor Quality Control functions and the in process work being performed by ABF personnel:

This QAI updated the spread sheets used to track RWR's. The spread sheet will be used not only for tracking purposes but as a guide for the inspection team to more readily access the RWR's for inspection purposes.

The QAI also updated the spreadsheet tracking the status of Non-Destructive Testing (NDT) on the project, and filed a hard copy of the NDT reports in the proper binder. The updated spreadsheet was forwarded to the inspection team for their use.

This QAI spent time maintaining the binder and spreadsheet tracking RWR's by weld joint number. Due to the amount of RWR correspondence, this task is on going. The tracking system, and filing system is in place now for organization by weld joint number so this should be a maintenance activity from now on.

This QAI continues closing out RWR's upon receipt of the QA Non-Destructive Testing Reports. When the QA NDT reports are received this QAI stamps the corresponding RWR "Completed" and files them in a three ring binder for future reference.

This QAI performed a general visual inspection of the galvanized coating on pipes with plate (6 total), and misc.

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## WELDING INSPECTION REPORT

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plates with tubes (94 total) of contract #04-D120F4/Bid #CCO7251. No defects were discovered during the inspection. The galvanizing process had been performed at Pacific Galvanizing Oakland CA and inspected at the shop prior to arriving here on site.

This writer received a copy of the documentation packet which consists of Pacific Galvanizing's Quality Control final Inspection reports the Bill of Lading, and the Certificate of Compliance.

This QAI intermittently observed the welder Richard Garcia grinding to a bright clean metal condition the areas on the following Stanchion Post that are to receive weld metal: S44o, S46i, S44i, and S48i.

The welder spent part of the shift depositing the fillet welds with approximately 100% being completed at the end of the shift. QC inspector Fred Michaels was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1000 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than specified. Using a Fluke brand Tong style meter, the parameters were verified to be 115 amps.

This QAI observed Quality Control Inspector Fred Michaels perform Magnetic Particle Testing on 100% of the welds on Stanchion Post S44i. The testing did not reveal any defects. At the conclusion of Quality Control Testing this QAI performed Magnetic Particle Testing on a random 10% of the total weld length on Stanchion Post S44i, no defects were noted. At the conclusion of testing the contractor moved the posts to blast and paint.

### Summary of Conversations:

See body of report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Daggett, Matt	Quality Assurance Inspector
<b>Reviewed By:</b>	Reyes, Danny	QA Reviewer

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